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(54) SEMICONDUCTOR SUBSTRATE, FIELD
EFFECT TRANSISTOR, METHOD FOR
FORMING SILICON-GERMANIUM LAYER,
METHOD FOR FORMING STRAINED SILICON
LAYER USING THE METHOD AND METHOD
FOR MANUFACTURING FIELD EFFECT
TRANSISTOR

SOLUTION: The semiconductor substrate has SiGe
layers 2 and 3 on the Si substrate 1. The crystal sur-
face of the Si substrate is an off-cut surface that in-
clines from the plane direction (001) toward the crystal
direction $\langle 100 \rangle$.

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(57) Abstract:

PROBLEM TO BE SOLVED: To reduce the threading
dislocation density of a SiGe layer in a method for form-
ing a semiconductor substrate, field effect transistor
and SiGe layer, a method for forming strained Si layer
using this method, and a method for manufacturing a
field effect transistor.

